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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/662,741	09/14/00	BUSTAMANTE	H 12755-052700

020350
TOWNSEND AND TOWNSEND AND CREW
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO CA 94111-3834

WM02/1010

EXAMINER

TO, D

ART UNIT

PAPER NUMBER

2682

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/662,741

Applicant(s)

Bustamante et al

Examiner

D. To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Reissue application filed 9/14/00.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

Reissue Applications

1. This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01.

A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

2. This application is objected to under 37 CFR 1.172(a) as the assignee has not established its ownership interest in the patent for which reissue is being requested. An assignee must establish its ownership interest in order to support the consent to a reissue application required by 37 CFR 1.172(a). The assignee's ownership interest is established by:

(a) filing in the reissue application evidence of a chain of title from the original owner to the assignee, or

(b) specifying in the record of the reissue application where such evidence is recorded in the Office (e.g., reel and frame number, etc.).

The submission with respect to (a) and (b) to establish ownership must be signed by a party authorized to act on behalf of the assignee. See MPEP § 1410.01.

An appropriate paper satisfying the requirements of 37 CFR 3.73 must be submitted in reply to this Office action.

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3. This reissue application was filed without the required offer to surrender the original patent or, if the original is lost or inaccessible, an affidavit or declaration to that effect. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.
4. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.
5. The reissue oath/declaration filed with this application is defective because it fails to contain a statement that all errors which are being corrected in the reissue application up to the time of filing of the oath/declaration arose without any deceptive intention on the part of the applicant. See 37 CFR 1.175 and MPEP § 1414.
6. The reissue oath/declaration filed with this application is defective because it fails to contain a statement that the inventor is a joint inventor of the invention claimed as required by 37 CFR 1.63(a)(4).
7. Claims 1-32 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

8. Claims 26-32 are rejected under 35 U.S.C. 251 as being an improper recapture of claimed subject matter deliberately canceled in the application for the patent upon which the present reissue is based. As stated in *Ball Corp. v. United States*, 221 USPQ 289, 295 (Fed. Cir. 1984):

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The recapture rule bars the patentee from acquiring, through reissue, claims that are of the same or broader scope than those claims that were canceled from the original application.

The reissue claim 26 is broader than claim 1 of the parent application serial no. 08/574,605. The limitations of reissue claim 26 were argued in both Amendments filed 5/20/97 and 12/4/97. The reissue claims 26-32 omit the limitation describing the subscriber station to operate in a receive-mode only to detect a stable downstream frequency from a head end signal and detect any received frequency error and adjust its initial frequency of operation in accordance therewith. This particular limitation was added to the parent claims of application serial no. 08/574,605 to obviate the rejection. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 USC 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

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made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graziano [US 4,128,740].

Regarding claim 26, Graziano discloses a cellular communication signal configuration arrangement for use in a cellular communication system comprising a plurality of cells (1-4 of Figs. 5 and 8), each of the plurality of cells comprising a plurality of sectors (see Fig. 8), a base station (see Fig. 3) associated with each of the plurality of cells, a plurality of sector beam antennas (see Fig. 2) associated with the base station (see Fig. 3), a plurality of subscriber stations (see Fig. 1) in a given cell of the plurality of cells in each of the plurality of sectors, the plurality of subscriber stations communicating with a local base station associated with the given cell (see Fig. 1) with each of the plurality of subscriber stations communicating with the local base station through a given sector beam antenna of the plurality of sector beam antennas (see Figs. 1-8) the communication signal configuration arrangement comprising: assigning one set of communication signal configuration (W6) to the plurality of subscriber stations differing from another set of communication signal configurations assigned to another plurality of subscriber stations in an immediately adjacent cell to the given cell (Z1), the another plurality of subscriber stations occupying another sector in a same relative location in an immediately adjacent cell to that of the given sector, wherein the one set of communication signal configurations enables each subscriber station of the plurality of subscriber stations to transmit communication signals to the given base

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station without substantially interfering with any other communication signals received by another base station in the immediately adjacent cell (see Summary of the Invention), see Figs. 1-8.

Graziano does not specifically show the claimed ~~the~~ subscriber station having narrow transmission beam width antenna. The examiner takes Official Notice that such feature is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the subscriber stations of Graziano with narrow transmission beam width antenna in order to further reduce interference.

Regarding claim 27, Graziano shows the claimed each of the plurality of cells is hexagonal in shape (see Fig. 8) and communication signal configuration arrangement provides at least six sectors (see Fig. 8) for each of the plurality of cells, see Fig. 8.

Regarding claim 28, although Graziano does not specifically show the claimed one set of communication configurations utilizes different communication signal polarities from any other communication signals received by another base station from another sector in the same relative location in the immediate adjacent cell, such feature would obviously minimize interference. Since it would be desirable to minimize interference, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify such feature discussed above to Graziano in order to improve in overall communication quality.

Regarding claim 29, Graziano shows the claimed one set of communication configurations utilizes different communication signal transmission frequencies from any other communication

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signals received by the another base station from another sector in the same relative location in the immediately adjacent cell (see for example Z6 and W6 in Fig. 8).

Regarding claim 30, Graziano does not show rectangular cells and at least eight sectors in each cell. One of ordinary skill in the art would have readily appreciated that if the particular area needs to have more coverage and usage, it would have been obvious to one of ordinary skill in the art to modify Graziano with rectangular cells and at least eight sectors in each cell in order to increase the frequency reuse and provide more coverage.

Regarding claims 31 and 32, the claims are interpreted and rejected for the same reasons as set forth in the rejection of claims 28-29 above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Longshore et al disclose a method and apparatus for signaling interference protection in a channel reuse radio network. [US 6,212,363]

Meidan et al disclose a method and apparatus for reducing interference in a radio communication link of a cellular communication system. [US 5,809,401]

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

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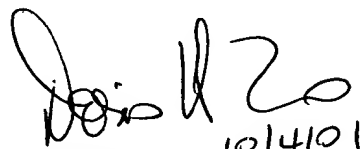
(703) 872-9314, (for formal communications intended for entry; and for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. To whose telephone number is (703) 305-4827.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Chang, can be reached on (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4750.


DORIS H. TO
PRIMARY EXAMINER 6014101